# REORGANIZATION OF THE ROYAL INDIAN MARINE



Report of the Departmental Committee.

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- 1. Stated generally the scope of the task entrusted to us is to Object of Committee.

  draw up a scheme for the purpose of putting into effect a policy defined as in the following formula:—
  - The reconstruction of the Royal Indian Marine as a combatant force, to enable India to enter upon the first stage of her own naval development, and ultimately to undertake her own naval defence.
  - 2. Our terms of reference, arranged for convenience in the order in which we shall deal with them, are as follows:—

To prepare a scheme for the reorganization of the Royal Indian Marine so as to form the nucleus of an Indian Navy, with special reference to

- (i) The functions to be ultimately performed by the Indian Navy and methods of employment with a view to its undertaking those functions.
- (ii) The number and class of vessels that can be maintained with available budget allotment.
- (iii) Recruitment, strength, training and conditions of service of personnel.
- (iv) Relations between the higher command of Indian Navy, Government of India and Commander-in-Chief, East Indies, including the proposed appointment of Chief Naval Staff, India.
- (v) Provision for and maintenance of vessels including the continuance, or abolition, of the Royal Indian Marine Dockyard.

## I.—Functions of the New Navy.

3. By far the most important aspect of the new force in its early stages will be its duty as a training squadron. The new personnel, will need to be thoroughly trained in gunnery, minesweeping, harbour defence and seamanship. In this connexion we cannot insist too

strongly on the ships of the Indian Navy becoming from the first a sea-going force. Efficiency and enthusiasm alike will melt away if the new navy remains in port, and practises nothing but harbour defence. A valuable service which we think that the Indian Navy should be able to undertake in the near future, will be the responsibility for policing the Persian Gulf in peace time, by which means the three vessels maintained in those waters by the Imperial Government will be set free.

Of the other duties at present performed by the Royal Indian Marine, we consider that the Marine Survey should be retained, as its work in peace and war is essential to a fighting sea service.

The control of the station ships at Aden, Port Blair, Rangoon and in the Persian Gulf, to attend to the conveyance of troops and officials and to supervise the work of lighting and buoying in the adjacent waters, should not be a function of the new navy. The retention of these responsibilities would not be, in our opinion, compatible with the development of a fighting force. The work of carrying troops can be contracted for commercially at rates which could hardly fail to be cheaper than the existing arrangement.

The new service should also be responsible for Marine transport, at present carried out by the Royal Indian Marine. The cost of storage and maintenance, in this connexion, will be a charge against the Indian Navy.

The functions of the new Indian Navy in peace time will, therefore, be as follows:—

- (a) The training of personnel for service in war.
- (b) The services required by the Indian Government in the Indian Ocean and Persian Gulf.
- (c) The organization of the Naval Defences at Ports which are under the control of the Indian Government.
- (d) Survey work in the Indian Ocean.
- (e) Marine transport work for the Government of India.

We recommend that in accordance with its new functions the service should be known as the "Royal Indian Navy" and should fly the White Ensign, which is the recognised flag of the naval fighting forces of the Empire.

## II.—Number and Class of Vessels, etc.

4. On the assumption that these will be the functions of the Indian Navy, we consider that a squadron of 4 sloops, 2 patrol craft vessels. 4 trawlers and 2 survey ships, together with one depôt ship, as already suggested, would suffice to begin with. We estimate that

the net annual cost of maintaining such a force would amount at first approximately to Rs. 63 lakhs as follows:—

							Rs.
Headquarters Staff		•					2,59,900
1 Depot Ship .							3,24,851
4 Sloops							12,04,224
2 Patrol craft vessels			`•				3,59,616
4 Trawlers							1,23,120
Officers on leave .							2,08,020
Pensions							9,10,000
Incidental expenses							3,98,740
Subsidy to Admiralty,	etc.						19,00,000
Survey ships .							4,89,000
Store Department				•.			30,820
Officers training in	Eng	land	and	with	the	East	
Indies Squadron	•	•	•	•	•	•	<b>52,14</b> 0
				To	TAL		62,60,431

This figure is exclusive of the following items:-

- (1) Rupees 12,50,000 cost of Lighting and Station Ships, which should be met from lighting fees and debited to other departments. At present 2 lakhs of this expenditure is debited to Political estimates and the remaining 10½ lakhs to Marine estimates.
- (2) Rupees 4,00,000 for military launches which will be included in the Military estimates.
- (3) Rupees 1,14,000 on account of transport establishment hitherto debited to His Majesty's Government.
- (4) Pension charges for ratings which will be a negligible figure for the first few years.

As soon as the Indian Navy is in a position to undertake the work of the Royal Navy in the Persian Gulf, it will be necessary to add at least 2 sloops to the force. The additional expenditure will, however, be partly set off by the saving of the existing expenditure of about 4 lakhs a year on fuel for the three Admiralty vessels, and on the refit of the 'Triad'. If our proposals for leasing the dockyard (paragraph 14) are accepted, no separate provision will be required under this head, as the cost of refit is included in the figure for each vessel.

The details of the above figure of Rs. 62,60,431 are given in Appendix 1. The corresponding figure in the Marine Budget for 1924-25 is Rs. 50,07,000, and in the estimates for 1925-26, Rs. 53,17,000. Both these figures are exclusive of the charges for lighting and station ships, and for military launches, mentioned above. Both are also amounts of net expenditure arrived at after deducting receipts. These

receipts are estimated in the Budget for 1925-26 at Rs. 9,33,000 as follows:—

						Rs.
Dockyard Service	s and	Sup	plies			3,72,000
Hire of vessels			٠.			1,98,000
Sale-proceeds of s	tores				٠,	2,00,000
Miscellaneous						1,63,000

No such receipts as the above will accrue under the new scheme, but if the Dockyard is leased as we propose (paragraph 14), the receipts on account of rental will help to reduce the net annual cost of the proposed organization.

If the present cost of the Royal Indian Marine be assumed to be the average of the years 1924-25 and 1925-26, the annual cost of the existing and proposed forces may be compared as in the following statement:—

	Net annual cost.	Lighting and Station Ships and Military Launches.	TOTAL.
	Rs.	Rs.	Rs.
(a) Royal Indian Marine .	51,62.000	16,50,000	68,12,000
(b) Indian Navy	62,60,000	16,50,000	79,10,000

Excess of (b) over (a)

. Rs. 10,98,000

This excess, however, is likely to be reduced to a considerable extent by the leasing of the Dockyard, and still further if, as is contemplated, the Government of India institute a system for the levy of fees for lighting on shipping companies.

5. Apart from recurring expenditure, we estimate that there will be the following initial expenses, assuming that the new sloops will be provided by the Home Government on loan to the Indian Navy:—

	$R_{s}$ .
Three sloops from England (including one to replace 'Elphinstone')	6,00,000
Fitting them in Bombay for permanent use in	
Tropies	1,50,000
Alterations to the Depot Ship 'Dalhousie'	50,000
Reconditioning 'Cornwallis'	50,000
Fitting out 4 trawlers	40,000
Additions to 'Baluchi' (P. C. Vessel) for service in	* > *
Tropics	10,000
Total .	9,00,000

#### III.—Personnel.

6. As shown in detail in Appendix 3, the following establishment Personnel required. of officers and warrant officers will be required:—Officers.

Flag Officer Comm	andii	ıg							1
Captains .				. `					9
Commanders.								•	19
Lieutenant-Comma	ander:	s and	Lieute	enants					42
Sub-Lieutenants									8
Midshipmen .									4
Boatswains .									14
Engineer Captain									1
Engineer Comman	dera								5
Engineer Lieutens	ant-C	omma	ınders,	Eng	ineer	Lieu	itenar	ıts	
and Engineer									38
Assistant Surgeon:	s								6

The figures for executive and engineer officers include provision for the following port appointments at Calcutta, Rangoon, Madras, Bombay, Karachi and Aden.—

Captains		จ	
Commanders		6	
Lieutenant-Commander		1	
Engineer Commanders		3	
Engineer Lieutenant-Commanders		10	
Boatswain		1	1

These officers being employed by Local Governments are paid by them, and their salaries are not a charge on the Marine Budget. Although it seems anomalous that these appointments should still continue to figure in the cadre of a combatant service, we have thought it necessary to retain them for the following reasons:—

Firstly, in time of war or emergency these officers will be the authorities responsible for definite naval duties in connexion with the defence of their ports, under the direct control of the Flag Officer Commanding.

Secondly, without these posts the service would not contain, in our opinion, a sufficient number of senior appointments to maintain the requisite flow of promotion.

Thirdly, these port officers will also be responsible, as already noted, for Marine transport duties in peace as well as in war.

The Royal Indian Marine also provides port officers for Chittagong, Akyab, Bassein and Moulmein, and a Marine transport officer at Mandalay, but as no defence functions are required of these officers in peace or war, we consider that the Indian Navy should not provide them.

- 7. The nature of the commissions to be granted to officers in the Commissions for Indian Navy is of importance. We recommend that King's commissions, similar to those now held by officers in the Royal Indian Marine, be granted to British and Indian officers alike. The commissions should confer an authority limited to the force in which they are granted, namely, the Royal Indian Navy. We strongly deprecate the use of any form of commission which might convey the impression that the officers of the Indian Navy held a purely subordinate status, such as is held by Viceroy's commissioned officers in the Indian Army.
- 8. With the proposed initial strength of the force, recruitment of executive officers will be required at the rate of Recruitment about 3 a year. We agree generally with Admiral Richmond's recommendation that British and Indian boys should enter by competition at the age of 18, exactly in the same way as public school cadets are now taken into the Royal Navy. We also agree with the proposal that the Indian cadets should be mainly recruited through the Prince of Wales' College, Dehra Dun. The examination for cadetships would be held simultaneously in England and in India. One appointment every year should be reserved for an Indian by either from Dehra Dun, or an English public school (see below), subject to his reaching a minimum qualifying standard in the examination. For some time at any rate the standard of education at Dehra Dun will be appreciably lower than at an English public school. It will therefore probably be necessary to raise the age-limit for Indians recruited from Dehra Dun to the Indian Navy from 18 to 19 years, on the analogy of a similar rule which already obtains in the case of Indian cadets for the army. As the age of study at Dehra Dun is 12 to 18, it is likely that several years will elapse before any Indian cadets enter the Navy from that Institution. We do not see how this can be avoided. Cadetships should, however, be open to Indian boys at English public schools from the beginning. We understand that there is a considerable number of these, some of whom might be attracted towards service in the Indian Navy.

On passing the examination British and Indian cadets should undergo a course of two years' training in naval technical schools in the United Kingdom. A suggested scheme of training is enclosed in Appendix 4. On the completion of their training cadets would be given their commissions in the Indian Navy, and would proceed to join the squadron in Indian waters. We have considered the possibility of conducting the initial technical training in India, but this would entail very great expenditure on establishments, and would reduce to vanishing point the funds available for ships.

It occurs to us that Indian entrants into the Navy vid Dehra Dun will normally have no sea experience whatever before passing their entrance examination into the Navy; and that, if they are then sent

straight to the United Kingdom, and made to undergo sea training in small vessels in home waters, there is a possibility of undue discouragement. We therefore propose that candidates for the Indian Navy, in the last two years of their education at Dehra Dun, should be given opportunities for short cruises, and some sea training, in ships of the training squadron.

- 9. For the officers and warrant officers of the new service, we do Pay and conditions of not propose any departure from the rates of pay service of officers.

  and pension now drawn by officers of the Royal Indian Marine. These rates were revised in 1920, and are in our view likely to prove suitable. We need not therefore complicate our scheme for reorganization by introducing any proposals under this head.
- 10. Ratings will be drawn from the same class and in the same Recruitment of manner as lascars are at present recruited for the Royal Indian Marine. The rates of pay will also be the same, but provision will have to be made for pensions and for furlough. We are confident that this class will provide a suitable material for manning the combatant force, and that if the terms of service are made attractive, they will be forthcoming. At present there is only one source of recruitment, namely, the coastal area in the vicinity of Ratnagiri. It might be found advisable to open up new fields of recruitment on the Malabar Coast, the Coromandel Coast, at Chittagong, and elsewhere

Training of recruits, which will also include educational training, will be carried out at Bombay in the depôt ship and the training squadron. It will be necessary in the initial stages to obtain the services of two specialist officers (gunnery and minesweeping) to supervise the training of recruits. We have considered the question of employing British petty officer instructors, but in view of the language difficulty we are doubtful whether their services would be of any value.

11. We recommend that engineer officers should be recruited for Recruitment and the Royal Indian Navy in precisely the same terms of service of manner as they now are for the Royal Indian engineers.

Marine, that is to say:—

Appointments are made by the Secretary of State for India. A candidate must have served at least 5 years as an apprentice in a recognized engineering firm or a Government Dockyard. A candidate must not be less than 21 or more than 25 years of age. In order to facilitate the entry of Indians into this branch of the service, we recommend that the Government of India should give financial assistance to suitable Indian candidates who are anxious to undergo the necessary training and qualify for selection. This assistance might take the forms inter alia of passage concessions and payment of premia to engineering firms; and Government might also exert

their influence to induce such firms to take Indians as apprentices. One vacancy in three should also be definitely reserved for an Indian if a suitable candidate is forthcoming. The terms of service should remain as at present. The Port Engineering appointments mentioned in paragraph 6 will continue to be available for the promotion of these officers—(see Appendix 3).

Conditions of service, pensions, pay and leave of ratings.

The age of entry of ratings should be between 14 and 16 years for boys, and between 16 and 20 years for men. Pensionable service should begin from 16 years. We propose that ratings should be enrolled in the first instance for a period of 6 years. If, however, it is found difficult in the initial stages to obtain recruits on this condition, it may be necessary to reduce the period. On the completion of 6 years' approved service, suitable ratings may be re-enrolled for further periods of 3 years at a time. A form of attestation similar to that in use for the Indian Army should be adopted and should provide amongst other things for conditions of discharge.

We propose that pensions should be granted on the same scale as obtains in the Indian Army, that is to say, a man will serve 15 years for a first pension of Rs. 5 a month, and after 18 years will receive an increased pension graduated according to his rank on retirement. We append a table showing the rates proposed (see Appendix 5).

The rates of pay suggested are given in Appendix 5 and are generally in accordance with those proposed by Admiral Mawbey. The nomenclature of the ratings has, however, been altered to conform with the Royal Navy.

As regards leave it will be necessary, if men are to be induced to volunteer for continuous service, to make some provision for furlough as well as privilege leave. We suggest that privilege leave be granted at the rate of 1 month on full pay in the year as at present. Furlough should be granted on half pay at the rate of 6 months after each completed period of 6 years' service. Provision must also be made for medical and casual leave. Free passages to and from their homes should be provided for men proceeding on privilege leave or furlough.

#### IV.—Command.

13. We propose that the command of the force should be vested in The Flag Officer a Flag Officer, with the title of "Flag Officer Commanding." This officer should be appointed from the Royal Navy at first, but later on the appointment should normally be held by an officer of the Indian Navy. We prefer the title of Flag Officer Commanding to that of Chief of the Naval Staff, as more descriptive of his status and duties. "Chief of Staff" implies an advisory position without executive powers. The tenure of office, in our opinion, should be for a minimum period of three years.

In the early stages, an Indian Navy could be administered by a single commander with a small staff. The simpler the organization, the more economically will it be controlled. The proposed organization of the Headquarters Staff is given in Appendix 2.

The responsibilities falling to the Flag Officer Commanding in peace time will be as follows:—

- (a) Preparation of the annual estimates.
- (b) Movements of ships.
- (c) Recruiting.
- (d) Training.
- (e) Drafting, appointments and promotion.
- (f) Refitting, victualling, storing, fuelling and ammunitioning.
- (g) Designs of new ships.
- (h) Maritime defence of ports under the control of the Indian Government.
- (i) Surveying service.
- (j) Marine transport.

In his relation to the Government of India, the Flag Officer Commanding should be in a position substantially analogous to that of the Air Officer Commanding, Royal Air Force, that is to say, he should be subordinate to the Commander in Chief in India in the latter's capacity of Minister of Defence, and responsible to him for the administration and efficiency of the Navy. Like the Air Officer Commanding he should also have the right of personal access to the Viceroy for the purpose of consultation on important questions relating to the Navy.

His headquarters should be in Bombay, but we propose that he should be at liberty to pay periodical visits to the Headquarters of the Government of India, in order to confer with the Marine Department. This practice is at present followed by the Director, Royal Indian Marine, and has been found eminently satisfactory. We do not eonsider it desirable or necessary to retain an officer of the Indian Navy at the Headquarters of the Government of India, in the capacity either of Secretary or of Liaison Officer.

The Flag Officer Commanding will be the official adviser of the Commander-in-Chief in India, and, through him, of the Government of India, on all matters relating to the internal administration of the Indian Navy, including harbour defence and the work of sea-going squadrons of the Navy. The adviser to the Government of India on matters of strategic importance will continue to be the Naval Commander-in-Chief, East Indies. Subject to a clear understanding of their respective spheres of authority, the closest co-operation in all matters should be maintained between the Naval Commander-in-Chief

and the Flag Officer Commanding the Indian Navy. In war time unity of command is essential, and we therefore recommend that in war the ships and personnel of the Indian Navy should automatically come under the direct control of the Commander-in-Chief, East Indies. For this reason, as well as others, we think it desirable that the post of Flag Officer Commanding should never be held by an officer senior on the Navy List to the Naval Commander-in-Chief.

In war the responsibilities of the Flag Officer Commanding should be:—

- (a) The naval defences at ports which are under the control of the Government of India.
- (b) Marine transport at the same ports.
- (c) Control of merchant shipping at the same ports.
- (d) Recruitment for ships of the Indian Navy.
- (e) Where required, refitting, victualling, storing and fuelling of ships on His Majesty's service, calling at Indian ports.
- (f) The administration and supply of ships employed in Harbour Defence.

## V.-Maintenance of Vessels, etc.

14. We have considered very carefully the question of the Dock-The Dockyard. There are three possibilities open to the Government of India. First, to sell the yard outright: second, to retain it under their own management: third, to lease it for a term of years to a private firm.

We have no hesitation in rejecting the idea of sale. Under the proposed scheme Bombay will be the headquarters of the Indian Navy. There is no other yard at present in that port which will meet requirements, if the force is to expand and develop along the lines that we contemplate, nor is there any practicable site where such a yard could be built to provide a repairing base both for the future Indian Navy and for the Imperial Navy. It would be in the highest degree undesirable to run the risk which outright sale would involve of the Dockyard being converted to other uses. The continued existence of the Dockyard as such is therefore in our opinion necessary.

There remain the alternatives of retention and lease, which are discussed in paragraphs 8 to 10 of Admiral Richmond's report. We have examined closely the figures of present cost of the yard, and we have had a statement prepared to show the probable expenditure on its maintenance for the purposes of an Indian Navy (Appendix 6). This statement also shows the estimated cost of the necessary refits—if carried out by private firms. The figures are based on the charges incurred during the last two years in the refit of sloops of the East Indies Squadron by private firms in Colombo. The Admiralty figures

have been taken for trawlers. There can be no doubt that the present cost of the yard is excessive. The establishment and plant were largely increased in 1919 and 1920 on the recommendation of the Dockvard Committee, which sat at the India Office after the presentation of Lord Jellicoe's report. Since then the refit of the East Indies Squadron has been transferred to Colombo, and the strength of the Royal Indian Marine has been greatly reduced by the abolition of troopships and other vessels. Although some retrenchments been effected recently in the Dockvard establishment, and more are contemplated, the fact remains that with the present strength of the Royal Indian Marine and, with the contemplated initial strength of the Royal Indian Navy, a dockyard of this size could not be maintained as an economical concern, unless private work and work for other departments in considerable volume were obtained. For many reasons we consider it undesirable that the Royal Indian Navy Government Dockyard should undertake such work. We estimate that the minimum annual cost of administration and upkeep of the Dockvard for purely Indian Naval purposes, and irrespective of the Headquarters staff of the Royal Indian Navy, which must remain whether the Dockyard is leased or not, will not be less than Rs. 4,50,000. To this must be added a sum approximating to Rs. 1.00,000 for dredging operations, to keep the entrance of the Dockyard clear. We estimate further that the annual cost of refitting the vessels of the proposed Indian Navy together with the station ships, if the work be undertaken by private contract, should not exceed 5 lakhs at the outside. The figure in the statement is Rs. 4,12,000 only. It will thus be seen that without even taking into consideration the cost of labour and materials required for the execution of annual refits, the supervision. contingent and indirect Dockyard charges alone are estimated as likely to equal, if not to exceed, the total amount for which the repairs could be carried out if entrusted to a private firm. This is largely due to the fact that the Dockyard is designed on a much larger scale, and is equipped with extensive and costly machinery capable of dealing with much more work than will be necessary for the refit of the small number of ships contemplated in the first instance for the Indian Navy. As we have already said, we do not recommend that work outside the requirements of the Indian Navy should be undertaken by the Dockvard. It will therefore obviously be to the financial advantage of Government to entrust the work of annual refit of ships in the Indian Navy to private firms—as is the practice of the Admiralty in the case of the East Indics Squadron.

We are lcd, then, to the conclusion that the retention of the yard under Government management would be an unjustifiable expense, and we proceed to consider the third possibility, namely, the leasing of the yard for a term of years to a private firm. For this course there is much to be urged. In the first place, it provides the only means, other than direct sale, by which Government can make its due profit out of

the high eapital value of the site. Secondly, it will relieve Government of all the expenses and difficulties of administration. Thirdly, it will bring the eost of maintenance and refit of vessels on to a trueeconomic basis. Fourthly, it will enable Government to resume the control of the yard at a future date, should it desire to do so. Fifthly, the saving effected will be available towards the provision of more ships for the Navy. The Doekyard by reason of its situation, size, arrangement, and fittings, offers, we believe, considerable attraetions to engineering firms, and we see no reason to doubt that, if it is put up for lease, tenders will be fortheoming. We therefore recommend that the Doekyard be offered for lease, and we consider that the lease should be for a period of fifteen years in the first instance. An essential condition should be that work for the Indian Navy should he given priority whenever required. The refit, however, of ships of the Indian Navv should not be a perquisite of this yard, but should be open to competitive tenders. The existence of other vards in Calcutta and Colombo, and of the Mazagaon Dockyard in Bombay itself, should act as a safeguard against monopoly and consequent inflation of charges.

At the time of lease the disposal of the existing machinery will require consideration. It may be necessary to make purchase of the machinery a condition of the lease. The stores required for the Marine Transport Department and for the Indian Navy, at present warehoused in the Dockyard, can without difficulty be transferred elsewhere. A portion of the Dockyard premises adjoining Campbell Park would have to be retained by Government for offices and official residences.

## VI.-Miscellaneous.

15. On the inauguration of the change, a certain number of officers Disposal of surplus of the Royal Indian Marine will become surplus officers. to requirements. The present establishment exceeds the eadre that we propose for the Indian Navy by 5 Commanders, 2 Lieutenants and Lieutenant-Commanders, 4 Engineer Commanders, and 6 Engineer Lieutenants and Engineer Lieutenant-Commanders. We propose that these 17 officers should be retired on the usual terms for surplus officers, unless employment under other Government departments can be offered to them, and they are willing to accept such employment. It may be found possible to transfer some of them permanently to the Lighting Service under the Department of Commerce.

Transfer of Royal Indian Navy, and those selected as such should, in our opinion, be given the opportunity to transfer. If they so desire. Their services in the Royal Indian Marine should be allowed to count towards promotion and pension in the Royal Indian Navy. The offer should, of course,

be made only to such men as will have a reasonable period of effective service still before them.

17. The following station ships are at present a part of the Royal Arrangements for Indian Marine:—

carrying on the lighting and other services performed by the station ships.

'Lawrence'				Persian Gulf.
'Clive'.				Burma Coast.
'Minto'.				Andamans.

These ships, which are almost entirely engaged upon civil duties, ean, in our opinion, form no part of the new Indian Navy. It would be impracticable for the combatant force to provide their personnel, or for them to be treated as ships of war and fly the White Ensign. They must, therefore, be definitely transferred from the moment that the Indian Navy comes into being. The present duties of these ships as also of the sloop "Cornwallis" while employed, as at present, at Aden, are:—

- (a) Attendance on lights and buoys
- (b) Conveyance of political and other officers of Government.
- (c) Conveyance of detachments of troops (except in the Persian Gulf).

Excepting the conveyance of officials serving under Provincial Governments, these duties all pertain to "Central Subjects" as set forth in Schedule I of the Devolution Rules. The departments concerned are the Commerce Department (for lights and buoys), the Army Department (for conveyance of troops), the Foreign and Political Department (for political duties), and the Home Department (for duties earried out by station ship at Port Blair). These departments will have to be required to make themselves responsible for earrying out the duties with which they are respectively concerned, when the new Indian Navy has come into existence. But as it may be difficult to reorganize the arrangements for lighting and buoying by that time, the Royal Indian Navy may have to continue to administer some or all of the station ships until such time as a Government Lighting Service is brought into being. The personnel of the ships, however. would have to be engaged under the Mercantile Marine Act, and could not form part of the Royal Indian Navy.

Transfer of command.

That moment and the Royal Indian Navy should come into being.

It is essential, therefore, that before the new Commander is appointed, the scheme for the creation of an Indian Navy should be definitely

sanctioned and the necessary financial provision made for its introduction. If circumstances permit, as much work as possible connected with the winding up of the old service should be done before the new Flag Officer Commanding arrives in India. On the other hand, we consider it indispensable to the success of the new venture, that the first Flag Officer Commanding should have at his right hand during the initial stages of his tenure an officer of proved experience in all Indian Marine matters. We, therefore, recommend that Captain Headlam, the present Director of the Royal Indian Marine, should remain on after the change for such period as may be found necessary, in the capacity of Chief Staff Officer and Adviser to the Flag Officer Commanding.

of Contribution £100,000 His to Majesty's Government.

19. In dealing with the financial aspect of our proposals, we have deliberately refrained from touching upon the question whether the creation of the Indian Navv should affect the continuance of the payment at present made from Indian revenues as a contribu-

tion towards the Imperial Navy. We have taken this course because we feel that it is not a matter which falls precisely within the terms of reference to us as an expert Departmental Committee. We also think that it would be premature to discuss this question until, at the earliest. the new Indian Navy is in a position to perform an appreciable portion of these services which are rendered to India by His Majesty's Navy, and in respect of which the contribution is paid.



## APPENDICES.

#### 60.

- 1. Statement of total cost of proposed Indian Navy.
- 2. Organization of Command (diagram).
- 3. Cadre of officers.
- 4. Proposed courses of training for officers.
- 5. Pay and pension scales of ratings.
- 6. Dockyard estimates, including cost of refit of Royal Indian Navy.



## APPENDIX No. 1.

# STATEMENT OF EXPENDITURE FOR THE INDIAN NAVY.

Summar	y.								Cost per annum.
							,		Rs.
Headquarters staff	•	•							2,59,900
Depôt ship .			•	•					3,24,851
Four sloops .									12,04,224
Two P. C. Boats							•		3,59,616
4 Trawlers .							•	•	1,23,120
Officers on leave								•	2,08,020
Pensions							•	•	9,10,000
Incidental expenses	•					•	•		3,98,740
Subsidy to Admiralty,	etc.				Ī		•		19,00,000
Survey ships .					•	•	•	•	4,89,000
Store Department					•	•	•	•	30,820
Officers training in En	gland	and w	ith th	e Eas	t In	diee.	Sanad	ron	
	.j		10	A SIL		ales	Бүчач		52,140
	- 5					T	DTAL	•	62,60,431
Lighting and Station 8								•	12,50,000
Military launches at po	orts in	India							4,00,000
		I A		11		_		-	
		14		18.3		To	TAL	٠.	16,50,000
		成曲							79,10,431
Transport Establishin			0		2				1,14,024
(Expenditure on Tra	nepor	t Estab	lishn	nent i	s at 1	reser	at debi	ted	_,_,,,,,,
to His Majesty's I	mperi	ial Gov	ernm	ent.)	•				
	-	4.4	1,1,1	i-i-i-l					
					•				
	Head	dquart	ers	Staff.					Cost per
1 TN 000 0									Rs.
1 Flag Officer Comman	ding	at Rs.	2,80	0 per	терв	em			33,600
1 Captain at Rs. 1,900	per n	nensem		•	•	•			22,800
1 Commander at Rs. 7	00 pa	y + R	s. <b>4</b> 0	0 staf	f pay				13,200
1 Engineer Captain at	Rs.	1,750 p	er me	ensem					21,000
Clerical staff						•			35,000
1 Controller of Marine	Aeco	unts a	nd l	Establ	ishm	ent		•	1,34,300 (a)
						Тотл		-	0.50.000
						TOL	rL	٠	<b>2,59</b> ,900

<sup>(</sup>a) Pending the future of the Dockyard, the figure for Controller of Marine Accounts and Establishment has been based upon a percentage of the total expenditure.

## Depôt Ship.

	Depôt Ship.	_
		Cost per
		annum.
1	Contain	Rs.
_	Captain	22,800
1	Commander	13,200
2	Lieutenant-Commanders	18,260
4	Lieutenants	22,120
4	Warrant officers (average pay Rs. 241+Rs. 2 per diem mess allowance)	14,488
1	Engineer Commander	13,200
2	Engineer Lieutenants	
	Assistant Surgeons (average pay Rs. 400+Rs. 50 staff allow-	13,460
-	ance per mensem + Rs. 2 per diem mess allowance)	12,260
	(1 I grade (average pay Rs. 174+Rs. 2 per diem)	
2	Clerks { mess allowance).	4,748
-	I III " (average pay Rs. 100+Rs. 2 per diem	4,740
	mess allowance).	
	Munshi (average pay Rs. 100)	1,200
1	Wireman (average pay Rs. 112)	1,344
1	Carpenter's mate, I class (average pay Rs. 94)	1,128
1	Carpenter's crew " ( ", ", 66)	792
1	Plumber (average pay Rs. 75)	<b>30</b> 0,
6	Petty officers ( ,, ,, ,, 72)	5,184
2	Leading seamen (average pay Rs. 40)	960
1	The state of the s	732
2	Leading ( 34)	816
	Signalmen	2,304
		3,720
_	Ordinary seamen ( " " " ,, 25)	3,000
1	( " " " " " " " " " " " " " " " " " " "	80 <b>£</b>
	Cassaub ( " " " 37)	411
	Bhandaris ( ", ", 31)	744
<b>2</b>	Bhandari's mates ( " " " 25)	600
6	Topasses ( ,, ,, ,, 28)	2,016
1	Lamp trimmer ( ,, ,, , 31)	372,
	General mess steward( ,, ,, ,, 122)	1,464
	Butler, II class ( ,, ,, 40)	480
	General mess servants, I class (average pay Rs. 30)	1,800
3		792.
	Cook, I class (average pay Rs. 100)	1,200
		600
		300
	Cook's mate, I class ( ,, ,, 25)	
1	" II " ( " " " 20)	240

For training			
<b>V</b>			Cost per
			annum.
			Rs.
60 Boys for training-ordinary seamen and able	seame	n (averag	ge
pay Rs. 15)	• . •	•	. 10,800
2 Petty officers (average pay Rs. 72		•	1.728
6 Leading seamen ( ,, ,, ,, 40)	• •		2,880
30 Stokers, I class ( ,, ,, 31)			. 11,160
30 ,, II ,, ( ,, ,, 25)		•	9,000
2 Stoker petty officers( ,, ,, ,, 72)		•	. 1,728
6 Leading stokers ( ,, ,, ,, 40,			. 2,880
4 I class drivers ( " " ,, 139)		•	. 6,672
2 II ,,, ., ., ., ., ., .110)		•	. 2,640
	т	OTAL	2.17.960
	•	Rs.	. 2
Add-Provision for Refitting	1:	5,000	
Stores		0,000	
Victualling		3,591	
The state of the s	. 4	.,001	
(213 Indians at annas 10 per diem.)	<b>3</b> 9	7,000	
Coal (for 9 months at Rs. 3,000)	mo <sup>2</sup>		
Water ( ,, ,, ,, ,, 700)		6,300	
Total	. 1,0	6,891	1,06,891
3.01.14.4.4		<del></del>	3,24,851
ALEX PLANS			
. Sloop.	1		
1 Commander	Λ		. 12,600
2 Lieutenants			. 12,200
1 Sub-Lieutenant		•	3,800
3 Engineer Lieutenants			10,800
I Assistant Surgeon (average pay Rs. 400+F	?a. 50 €	staff allo	•
ance +Rs. 2 per diem mess allowance)			6,130
1 Boatswain (average pay Rs. 241 + Rs. 2 per d	liem mes	s allowan	ce) 3,622
1 Wireless operator (average pay Rs. 335 inc	cluding	allowane	es) 4,020
1 Clerk, II grade (average pay Rs. 125+Rs.	. 2 per	diem m	688
allowance,		•	2,230
5 Petty officers (average pay Rs. 72) .		•	4,320
3 Leading scamen (average pay Rs. 40)			1,440
16 Able seamen (average pay Rs. 31)		•	. 5,952
16 Ordinary seamen (average pay Rs. 25)		•	4,800
3 Listeners (average pay Rs. 35)			. 1,260
1 Leading signalman (average pay Rs. 34)	•. •	4	. , , 408
2 Signalmen (average pay Rs. 24)			. 576
	Carrie	l over	74,158
	J.312101		

## Sloop-contd.

Sloop—contd.		
		Cost per annum.
		Rs.
Brou	ght forward	. 74,158
2 Drivers, I class (average pay Rs. 139)		. 3,336
2 ,, II ,, ( ,, ,, 110) .		. 2,640
1 Stoker petty officer (average pay Rs. 72) .		. 864
8 Leading stokers ( " " " 40) .		. 3,840
18 Stokers, I class ( ,, ,, ,, 31) .		. 6,696
12 ,, II ,, ( ,, ,, 25) .		. 3,600
1 Carpenter ( ,, ,, ,, 112) .		. 1,344
1 Carpenter's mate, I class (average pay Rs. 94)		. 1,128
1 Ship's steward (average pay Rs. 67)) .		. 804
1 Cook, I class ( ,, ,, 100) .		. 1,200
1 Cook's mate, I class ( ,, ,, 25) .		. 300
1 General mess steward, I class (average pay Rs	. 122) .	. 1,464
2 Mess servants, I class (average pay Rs. 30) .		. 720
2 Mashalchies (average pay Rs. 20).		. 480
2 Bhandaris ( " " " 31).	34	. 744
2 Bhandari's mates ( " " " , " 25)	>	. 600
5 Topasses ( " " " 28)		. 1,680
	TOTAL	1,05,598
	Rs.	
Fuel, 2,100 tons at Rs. 45 per ton .	. 94,500	
Ammunition	. 13,200	
Naval stores	30,000	
Yearly Refit	. 30,000	
Minesweeping store replacement	. 1,120	
Victualling (108 Indians at annas 10 per diem)	. 24,638	
Water	. 2,000	
TOTAL	. 1,95,458	1,95,458
·		3,01,056
Cost of 4 sloops per annum, Rs	s. 3,01,056 × 4	=Rs, 12,04,224
P. C. Boat.		
1 Lieutenant		. 5,600
1 Sub-Lieutenant	•	. 3,600
2 Engineer Lieutenants		. 12,000
3 Petty officers (average pay Rs. 72)		. 2,592
2 Leading seamen (average pay Rs. 40)		. 960
12 Able seamen ( ,, ,, ,, 31) .	•	. 4,464
12 Ordinary seamen ( ,, ,, ,, 25)		3,600
	~	
	Carried over	32,816

## P. C. Boat-contd.

	Cost per annum.
D 1.4	Rs.
Brought ferward .	32,816
3 Drivers, I class (average pay Rs. 139)	5,004
1 Stoker petty officer ( ,, ,, ,, 72)	864
2 Leading stokers ( " " " 40)	960
7 Stokers, I class ( ,, ,, ,, 31)	2,604
8 ,, II ,, ( ,, ,, 25) ,	2,400
1 Wireman (average pay Rs. 112)	1,344
1 Carpenter's mate, II class (average pay Rs. 69)	828
1 Butler, II class (average pay Rs. 40)	480
1 General mess servant, II class (average pay Rs. 22)	264
1 Cook's mate (average pay Rs. 20)	240
l Mashalchi ( ,, ,, ,, 20)	240
<b>2</b> Cassaubs (· ,, ,, ,, 37)	888
2 Bhandaris ( ' ", ' ", ", 31)	744
2 Topasses ( ,, ,, ,, 28)	672
1 Leading signalman (average pay Rs. 34)	408
I Signalman ( ,, ,, ,, 24)	288
1 Wireless Telegraphist (average pay Rs. 335)	4,020
3 Listeners (average pay Rs. 35)	1,260
Total .	56,324
Rs.	00,022
Yearly refit	
Stores	
Ammunition 13,200	
Fuel	
Victualling (67 Indians at annas 10 per diem) 15,284	
Water 1,000	
Total . 1,23,484	1,23,484
	1,79,808
D. 940 010 t. 0	•
or Rs. 3,59,616 for 2	P. U. boats.
Trawler.	
Fuel, 300 tons at Rs. 45	13,500
Ammunition	1,650
Stores	7,500
Yearly refit	7,000
Replacement of minesweeping stores	1,130
- -	30,780
or Rs. 1,23,120 for	

or Rs. 1,23,120 for 4 Trawlers.

Officers and crew are included in the complement of the Depôt ships to which the trawlers are tenders.

## Officers on leave.

£		Cost per annum. Rs.
2 Captains		
4 Commanders 2,548		
9 Lieutenant-Commanders and		
Lieutenants 4,680		
2 Boatswains		
8 Engineer Lieutenant-Com- manders, Engineer Lieute- nants and Engineer Sub-		
Lieutenants 4,160		
Total . 13,868 at Rs	. 15 a £==	Rs. 2,08,020
Pensions.		
Pensions		9,10,000
Note.—The amount on account of pensionary charges which are now being paid as based with reference to B 1925-26, together with an additional lakh of rupees in resperties to the probable premature retirements.	. I. M. Bud ect of pensio	get Estimates for n charges due to
Incidental expenses.		Cost per
		annum.
		Rsz
Shore allowance for officers		. 49,480
Outfit and clothing allowance		. 15,000
Marriage allowance		. 3,000
Pilotage		. 30,000
Telephone		. 2,000
Contingencies		• 19,000
Travelling expenses, Flag Officer Commanding .		. 3,700
Medical stores		. 16,000
Passage and conveyance of officers and men :		• 30,000
Freight on Europe stores		• 10,000
Miscellaneous		. 62,000
Sumptuary allowance for Flag Officer Commanding		. 6,000
Repairs to Harbour Craft (3 launches)		19,000
Crews, stores and fuel for ditto		50,000
Coal depôts—upkeep of (if Basidu and Bushire are al	holished)	72,000
Establishment, etc., charges on account of Perim Lig		. 11,560
And the state of t	TOTAL	3,98,740
Subsidy to Admiralty, coal, et		
Allowance to Admiralty at Rs. 15 to £		.15.00,000
Coal for His Majesty's ships of war in Indian Seas		3,60,000
Refit of "Triad"	• •	. 30,000
Allowance for Naval Commander-in-Chief		. 10,000
CALIFORNIO AND STORES COMMINGRATION OF STORES	TOTAL	.19,00,000
		-,,

									Cost per annum.
			Su	rvey S	hips.				annum.
Investigator "									Rs. . 3,69,000
Palinurus "	•		•	•	•	•	•	•	. 1,20,000
							To	TAL	. 4,89,000
						based	with 1	efere	nce to past actuals.
	Ma	trine	Tra	nsport	Dep	oart m	ent.		n
Bombay .		_							$ m R_{s.}  m .  m 85,104$
Karachi .	•		•			•	•	•	. 28,920
							To	TAL	. 1,14,024
The case of the	rane	n art	- Da	nartn	ant	hac	haan	enl	mitted to the
Government of India									
OFFICIALISM OF FIGURE	ise [see			Depar			c. 00.	115740	,1101011.
		2,	.,, .	Degrain	· men				$R_s$ .
1 Storekeeper .		•		•	•		•	•.	. 14,000
2 Store House men	•	٠	•	•	•	•	•	•	2,800
4 Clerks			- 5	40 33		٠	٠	• '	. 6,610
12 Permanent coolies	•	6		2-51	32	3.	•	٠	<b>. 4,</b> 380
Casual labour .	•	1	10.1			5	•	٠	3,000
•		6					Tot	FAL	. 30,820
Figures on the su	oposi	tion	tha	the	Dock	cvard	l will	not	be maintained.
	-		1 Sec.	nd sta		-			
				d w	1	1			Rs.
Barma	٠	A			14		:	:	. 4,00,000
Persian Galf.	•	40					•	•	· 2,00,000 (a)
Aden	•	47		2			٠	•	. 3,50,000
Audamans	٠		নিন্	nia a	JiF	٠	•	•	. 3,00,000 
							Tor	AL	.12,50,000.
			(a)	Repres	ents I	Indian	share	only.	
This includes all es	nsqz	litai							
refit based on past act			•		ŕ				
		RGE	s' Fo	r Ay	tme s	OITE	s.		
•		Cost	of z	1mmu	ution	ւ.			
			,						€ s. d.
One 4" cartridge	٠	•				•	•	•	. 2 6 4
One 4" shell (practice)		٠	•	•	•		•	•	. 0 14 9
One 12-pdr. 12 cwt. c		-	•	•			•		. 0 19 19
One 12-pdr. 12 cwt. sl				•	•		•	•	. 0 10 9
One 12-pdr. 12 cwt. p		e she	ot .	•		•	•	•	. 0 3 7
1,000 2-pdr, poin poin	٠	•		•	•		•		.111 10 0
1.000 1" aiming .	•	•	•	•			•	•	. 8 6 8
1,000 pistol	•	•	•	•	•	•	•	•	. 5 5 0
1.000 :303						•		•	. 8 6 8

## CHARGES OF AMMUNITION-contd.

## Suggested expenditure.

4" 62 per gun (including 1 H. E. and 1 C. P. C.).

12-pdr. 80 per gun.

1" 500 per gun.

·303 4,000 rounds.

2-pdr. pom pom, 250 per gun.

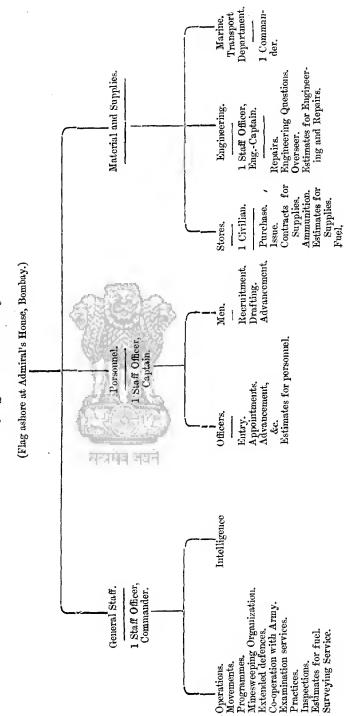
Cost of ammunition for a sloop . . . £880 = Rs. 13,200 Cost of ammunition for a trawler . . . £110 = Rs. 1,650



# APPENDIX No. 2.

ORGANIZATION OF COMMAND.

Flag Officer Commanding.



## APPENDIX No. 3.

	Rear-Admiral.	Captains.	Commanders.	Lieutenant-Commanders and Lieutenants.	Sub-Lieutenants.	Midshipmen.	Boatswains,	Engineer Captain,	Engineer Commanders,	Engineer Lieutenant-Commanders, Engineer Lieutenants and Engi- neer Sub-Lieutenants.	Assistant Surgeons:
Headquarters Staff .	. 1	1	1					1			:
Depôt Ship		1	1	6			5		1	2	2
No. 1 Sloop			1	2	1		1			3	1
No. 2 Sloop			1	2.	1		1			3	î
No. 3 Sloop		AT.	1	2	1		1	,		3	1
No. 4 Sloop			1	2	1		1			3	1
Pathan				1	1					2	
Baluchi		100		1	1					2	1
Trawler No. 1, 2, 3 and 4 Surveying Service—	•		Includ	led in I	epôt	Ship	comp	lemer	nt.	1	
"Investigator" .	}	T	12	757	2		1			2	
"Palinurus"	)						ļ				
Marine Transport .	•	• • • •	1	3							
Port authorities		5	6	1			1		.3	10	
Instruction in England an serving on E. I. Squadron.	d			6		4					
Coaling Depôts							i				
On leave		2	4	9			2		1	8	
Tor AL	. 1	9	19	42	8	4	14	1	5	38	6

#### APPENDIX No. 4.

PROPOSED COURSES OF TRAINING FOR OFFICERS.

The following is the sequence of training and advancement of an officer of the Indian Navy proposed:—

Enter at the age of 18 from a public school, or 19 from Dehra Duns as the case may be, by competitive examination.

Then proceed as follows:--

- 4 months at the Navigation School for instruction in Navigation and Pilotage.
- 4 months at Whale Island for instruction in Gunnery. (To include instruction with guns up to and including 6 inch.)
- 6 months at sca in an Atlantic Fleet Destroyer. Not to remain in the vessel if she refits, the object being to obtain actual sea-going experience.
- 2 months at Keyham, for a course of engineering and electricity.
- 2 months at the Torpedo School for instruction in mining sweeping and use of depth charges.
- 2 months at one of the Barracks for instruction in signals, physical training and Petty Officers' course.
- 1 month at Greenwich-War Course and Navigation.

Total 21 months' work. Three months' leave.

2. On completion of the courses in England the officers to become Sub-Lieutenants, and be appointed to sloops. Two years' active sea service in these vessels should give them the experience necessary for performing the duties of Lieutenant to which rank, if recommended, they should then be promoted. (Age 21½—23½.)

A period of service of about one year in the Surveying service is recommended for as many officers as is practicable. The experience is invaluable, but the numbers employed must be kept within limits, as Officers Commanding surveying ships must have an adequate proportion of experienced officers serving under them.

Opportunity should be taken for officers to attend short Gunnery and Mining Courses every 5 years when in the United Kingdom on leave.

## APPENDIX No. 5.

Designation.		Pay.	Pension scale.
		Rs.	(The Nos. represent scale of pension as shown on page 28.)
Chief petty officer		. 100	3
Petty officer		. 57-6-87	3
Leading seaman		. 36-2-42	<b>2</b>
Able seaman	•	. 31	1
Ordinary seaman	•	. 25	1
Boy		. 15	1
Chief stoker		94-7-115	3
Stoker petty officer		57-6-87	3
Leading stoker		36-2-42	$^{2}$
Stoker, I class		31	1
" II "		25	1
Wireman		95-5-120	3
Carpenter's mate, I class .		94	3
TT		69	3
Carpenter's crew .		66	
Plumber	180	6B 3005/*	3
Cassaub, I elass		75	3
**	WHILE	37	2
Bhandari	3313	31	1
Bhandari's mate		31,	1
		25	1
Lamp trimmer	के भी द	31	1
Topass		28	1
Writer	Transit of	45-5-50	2
Ship's steward	학교 박합	-5-75	3
General mess steward .		100-10-130	3
,, ,, butler, I class		50	2
" " " " II "		40	.2
" " servant, I class		30	1
" " " II "		. 22	1
Warrant officers' mess servant	, I class .	22	1
29 29 39	ΙΙ ".	20	. 1
Cook, I class		100	3
" II "		50	2
Cook's mate, I class		25	1
" " II "		20	1
Masalchi		20	1
Commander's servant .		30	1
Yeoman of signals		61	3
Leading signalman		. 34	<b>2</b>
Signalman		. 24	1
		*	

 $Good\ conduct\ badges.$ —Good conduct badges to be awarded as follows:—

								Per mensem.
								Rs.
1 badge	afte	er 4	years	approve	l service			<b>2</b>
2 badges		8	,,	,,	,,			3
3 "	,,	12	33	"	,,			4

Pension scale.—Pensions as for combatants of the Indian Army, vide paragraph 591 II of Pay and Allowances Regulations, Part II.

Scale 1.—As for sowars, sepoys and others ranking as such.

- 2. " Lance-dafadars, naiks and others ranking as such.
- , 3. , Dafadars, havildars and others ranking as such.



## APPENDIX No. 6.

Estimated approximate annual expenditure on establishment and incidental charges likely to be incurred in the maintenance of the Dockyard for the purposes of the Indian Navy.

							Rs.	
Engineer Manager's De	partn	nent					1,53,780	
Store Department	•						48,888	
Dockyard Police .				·· 🕻			64,500	
Medical charges .							9,840	
Boatswain of the Yard	•			~			10 <b>,44</b> 0	
Contingencies							9,000	
Indirect shop charges			•			•	1,50,000	
•								
				Tot		4,46,448		

The Director, Royal Indian Marine, considers that when surplus machinery has been disposed of, the personnel reduced to a minimum, the stores re-arranged (surplus stores having been disposed of) and repairs are being carried out on ships of a standard pattern, the indirect shop charges should not exceed Rs. 1,50,000.

The following figures show the estimated cost of refits for the undermentioned vessels, on the basis of the charges incurred by the East Indies Squadron, for refits carried out by private contractors at Colombo:—

			415		V25 20 a		Rs.			${ m Rs.}$
4	Sloops at			1121	ita' se	13	30,000	each	=	1,20,000
2	P. C. boats at	t.		ulta.	del el	47	25,000	**	=	50,000
1	Depôt ship at	t.	•				15,000		=	15,000
4	Trawlers at	•					7,000	each	=	28,000
2	Survey ships	at					30,000	**	==	60,000
	'Clive'						30,000			30,000
	'Lawrence'						30,000			30,000
	' Minto '						30,000			30,000
	Military lav	unches	, say				30,000			30,000
	Harbour la	inche	s, say	•	•		19,000			.19,000
							TOTAL		-	4,12,000